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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,335	12/18/2003	Mikhail Tarnopolsky		9609

7590 06/14/2006  
Mikhail Tarnopolsky  
7110 Ridge Court  
Brooklyn, NY 11209

EXAMINER

CHARLES, MARCUS

ART UNIT PAPER NUMBER

3682

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/738,335

Applicant(s)

TARNOPOLSKY ET AL.

Examiner

Marcus Charles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12-18-2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

This is the first action relating to serial application number filed 12-18-2003. Claims 1-5 are currently pending.

#### ***Drawings***

1. The drawings are objected to because in the various parts of the drawing must be identified by reference numerals. Therefore, the driving sprocket, freewheel chain and bearings in fig 1 and 2 must be depicted by reference numerals.

In fig. 3, it is unclear as to G.L represents.

The reference character "1" has been used to designate both a pedal and axis (see figs. 1 and 3).

In fig 1, the references A, B, II-II and 2 are confusing because it appears that they represents the axis and not an axle.

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the section of the pedal having a contour as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). The drawing fails to show the contour as specified in the specification. There are no specific drawing details as to the connection between the gravitational lever and the sprocket so as to understand how the GL powers the sprocket. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being

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amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The disclosure is objected to because of the following informalities: in page 4, the reference I-I depicts an axis and not an axle. In line 11, "the first one" should be the -- first part. In addition in line 11, the phrase "of a vehicle" is unclear because it is not clear if the vehicle is the bicycle as mentioned above. In line 13, it is not clear as to what is meant by "and all details". It should be noted that the arrow A and B should be II and III respectively. The references to the direction must depict the figures they represent. Note the axle should be reference by numbers.

It is suggested that the term "providing" is a more appropriate term to "getting".

It is not clear as to what "themselves" mean. If it is the mass and gravitational

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energy or sources of energy. Further more it is not clear as to what energy is being converted.

In page 5, it is unclear as to what the first paragraph is trying to convey. There is no period as to determine if there should be a continuation or an end to the paragraph. In line 5, it is not clear if the phrase "Fig.3" should be deleted. In line 7, "it" should be -- its-- prior to "rotation".

It is not clear as to what is the unbalance part of the pedal. It is difficult to identify the unbalance part without proper referencing. The process of kinetic relations between the sprocket, chain periphery and disk is unclear because there is not detail as to how they correlate to produce such energy. Furthermore, it is not clear as to how the sprocket is powered by gravity. There are no specific details as to the process. It is not clear as to why reference 6 is called "chain periphery since the chain has no direct contact with that periphery. It looks like a sprocket engagement periphery of the disk. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear as to how the energy conversion can be carried out via a one-way rotatable element and the first rotatable element being connected to a second rotatable element via a one-way clutch. In addition, it is not clear as to what is meant by a real axis. The specification fails to clearly define a real axis. In addition, one of ordinary skill in the art would not be able to understand define the difference between the one-way rotatable member and an overrunning clutch. In addition, it is not clear as to how the sprocket can rotate faster than usual when the driving sprocket rotates together with the crank axle under the same equal condition. Furthermore, The output energy being greater than the input energy sound does not meet the laws required by the conservation of energy. The specification does not clearly explain or prove that this new principle exists.

6. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). In line 6, it is not clear as to what the driving power relates to. In addition, "the driving power lacks antecedent basis. In addition, it is not clear as to the difference between the over running clutch and "the one way rotatable element". In line 10, it is not clear as to what is the "normal forward

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motion". It is not clear as to the relating between tothing and the third rotatable element. In the claim, it appears that there are five axles. Therefore, it is unclear as to what part each individual axle plays in the claimed invention. In addition, it is not clear as to what is being considered as a "real axle" as compare to the other axles.

7. The claims are replete with indefinite problems rendering the intended scope of the claims unclear and confusing. Applicant is urged to contact the examiner so as to clarify the indefinites.


### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koch (4,425,824), Frazeur (631,208), Yamamoto (1,411,548), Yamaguchi (4,560,182), Kang et al. (6,152,471), Jakovljevis (6,830,259), Bullis (597,098), Garneau (5,207,119) and Brown (4,309,043) disclose a drive system for a bicycle comprising a pedal connected to a set of gears for providing rotational power to the transmission.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (571) 272-7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ridley Richard can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Marcus Charles  
Primary Examiner  
Art Unit 3682  
June 08, 2006